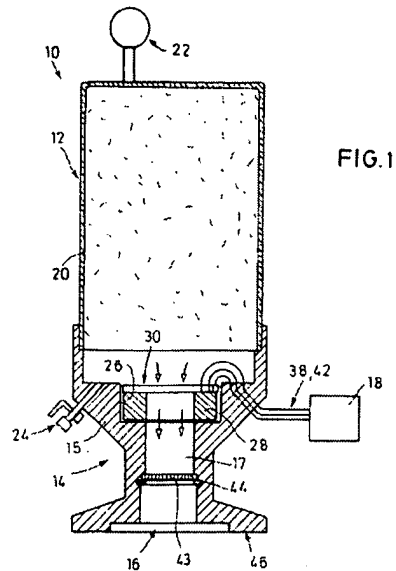


### **REMARKS**

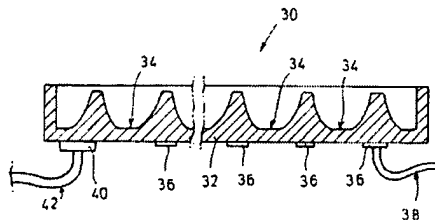
Claims 5-8 are pending in this application and have been rejected by the Examiner in a non-final Office Action to which this Amendment is responsive. The application has been carefully reviewed in light of the rejections. Claim 5, the sole pending independent claim, has been amended in an effort to more clearly describe the present invention and not for reasons related solely to patentability. To that end, it is believed that no new matter has been added. In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Claims 5 and 7-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over Applicant admitted prior art in view of German Patent No. DE 101 22 733 A1 to Gerdau (identified as Ludolf by the Examiner) ("Gerdau") in view of the Polymer Handbook. Claim 6 stands rejected under U.S.C. § 103(a) as being unpatentable over Applicant admitted prior art in view of Gerdau in view of the Polymer Handbook as applied to claim 5 and further in view of U.S. Patent No. 6,815,107 to Inai et al. ("Inai"). Accordingly, all pending claims have been rejected under 35 U.S.C. § 103(a) as being obvious over Gerdau in view of other references.

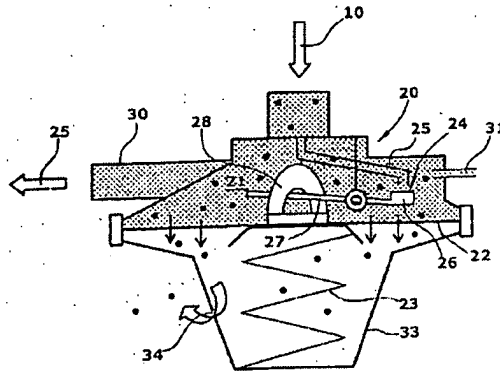
The method of operating a test leak unit disclosed in Gerdau is significantly different than that of the present invention. Gerdau discloses a test leak device 10 that has a test gas reservoir 12 containing a pressurized test gas, wherein the test gas reservoir 12 is enclosed by a membrane 30 that leads to the test leak outlet 16 (i.e., the test gas exits the test gas reservoir 12 **through the membrane 30** as depicted by the flow arrows leading towards the test leak outlet 16 in Figure 1 below).



The membrane 30, shown in Figure 2, is a silicon oxide disk comprising a plurality of windows 34 that allow the controlled passage of a helium test gas **through the membrane 30**. The leak rate is determined by the temperature of these windows.



Unlike Gerdau, the hydrogen test leak unit of the present invention has a chamber 21 that is substantially sealed by an elastomeric membrane 22.



**Fig.2**

Also unlike Gerda, the chamber 21 has a test leak outlet 30 separate from the membrane 22 with a leak-determining capillary leading from the chamber 21. The elastomeric properties of the membrane 22 allow it to act as a diaphragm, the movements of which open and close a pressure control valve 24 to maintain a constant pressure within the chamber 21. Although some gas is diffused through this elastomeric membrane 22, the membrane 22 does not function as the test leak outlet 30 from the chamber 21 like that of membrane 30 of Gerda.

As such, the problems addressed by the membrane of Gerdau, namely the controlled leak of a test gas through that membrane using temperature control, is very different than the problem addressed by the elastomeric membrane in the present invention, namely the maintenance of a constant pressure within a test gas chamber having a test leak outlet separate from the membrane through the movements of that membrane. Furthermore, Applicant disagrees with the Examiner's position that polydimethylsiloxane is a "typical" polymer of the silicon oxide disclosed in Gerdau, such that one of skill in the art would have looked to a membrane made of polydimethylsiloxane, which has vastly different physical properties than silicon oxide, to solve a problem very different than that addressed by the membrane of Gerdau. Therefore, it would not have been obvious to one of ordinary skill in the art to use the membrane of Gerdau for the purpose of controlling a pressure valve in order to maintain a constant pressure within the chamber.

Claim 5 has been amended to more clearly describe the present invention, and, in particular, the method of using the movements of the membrane to maintain a constant pressure within the chamber. Applicant respectfully submits that the limitations added to claim 5 by the present amendment render the Examiner's prior rejection moot.

For all of these reasons and in light of the amendment to independent claim 5, Applicant respectfully requests that the Examiner's rejection of claim 5 be withdrawn. Furthermore, since "[d]ependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious," *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988), Applicant requests that the Examiner's rejection of dependent claims 6-8, all of which depend from independent claim 5, also be withdrawn.

In view of the above amendment, Applicant believes the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0289, under Order No. 327\_109 from which the undersigned is authorized to draw.

Dated: March 30, 2009

Respectfully submitted,

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